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- 2. <u>Federal-Aid Project on the National Highway System</u>. Design elements not meeting the criteria for Level One should be treated in accordance with the procedure described in Section 40-8.04. For Level Two design exceptions, the FHWA should be informed of the exceptions which are not exempt from FHWA oversight.
- 3. <u>State-Funded Project, FHWA Oversight Exempt Project, or Project Not on the NHS.</u> All design elements, whether for a State-highway or local agency project, not meeting the criteria for Level One should be documented and approved as an INDOT exception. Where Level Two criteria will not be met, the criteria that have not been met should be documented in the project file along with a brief rationale.
- 4. <u>Locally-Funded Project</u>. Elements for which the proposed design deviates from the criteria provided in Part V should be documented in the project file.
- 5. <u>Signing and Dating Design Exception Request</u>. For Level One and Level Two design exception requests, the designer should sign and date the request. A consultant's designer should also include the name of the consulting firm below the signer's name.

40-8.04 Procedures for Level One Design Exception

The designer will not request an exception to the Level One design criteria until he/she has fully evaluated the impacts of the proposed design (i.e., the exception) and the associated impacts of fully meeting the Level One criteria. The evaluation process shall include obtaining comments from the applicable offices or teams including the following:

- 1. Highway Operations Division, Office of Traffic Engineering;
- 2. Production Management Division, Office of Environmental Services, Environmental Policy Team;
- 3. Production Management Division, Office of Geotechnical Engineering;
- 4. Production Management Division, Office of Real Estate, Property Management Team;
- 5. Production Management Division, Office of Real Estate, Utilities and Railroads Team;
- 6. Production Management Division, Office of Structural Services, Hydraulics Team;

After review by the applicable offices or teams, the design exception shall then be routed in the order shown below for further comments, recommendations, and final action.

40-8.04(01) Department Procedures

Each design element not meeting the Level One criteria will require a formal, written INDOT exception. This includes all paving exceptions, S-lines, and traffic maintenance phases. See Figure 40-8B, Level One Design Exception Checklist. An editable version of this document may be found on the Department's website, at www.in.gov/dot/div/contracts/design/dmforms/. All design exceptions for a project may be included in one document. Each of the items described below must be addressed in the order as follows:

- 1. <u>All Level One Criteria (Except Physically-Challenged Individuals Accessibility)</u>. The written design exception request will, at a minimum, address the following:
 - a. Project Description. This includes project location, functional classification, description of work, and type of area (residential, commercial, rural, etc.) in which the project is located. The location of the design exception should be identified by referencing it to the nearest Department-maintained route or other major point such as a county line.
 - b. Design Feature. This is a description of the design feature that does not meet the Department's criteria. Both the proposed criteria and the Department criteria should be identified, with respective design speeds where applicable. Drawings should be used to explain the criteria if necessary. The reason for the design exception request should be clearly indicated.
 - c. Construction Costs. This is the additional cost to construct the feature to meet the Department criteria. An abbreviated breakdown of the costs should be included.
 - d. Project Design. This includes the basic design parameters of the project (e.g., current and projected 20-year traffic volumes, design speed, posted speed, percent trucks, design criteria, terrain, and access control).
 - e. Crash Analysis. In addition to furnishing the computer printout of crash experience for the previous 3-year period, the crash data must be presented as follows:
 - (1) It should be summarized and described in general terms (e.g., type, severity, contributing circumstances).

- All available sources (city, county, and state police) must be contacted to obtain the data and be noted in the design exception request.
- (3) The crash experience which is related to the design feature and does not meet Department criteria should be analyzed and evaluated. The evaluation may include, for example, a comparison of the crash rate on the highway to the Statewide rate for that type of facility or may include a statistical analysis of the crash experience at the location of the design feature (e.g., a horizontal curve).
- f. Cost-Effective Analysis. A cost-effective analysis should be conducted to justify the proposed design exception, if applicable (e.g., there are crashes related to the design feature in question. See Chapter Fifty for more information.
- g. Ancillary Impacts. Any adverse effects the design exception will have on any other design elements on or near the project site must be evaluated and documented (e.g., sight distance on a horizontal curve impacts intersection sight distance at an intersection outside the project limits).
- h. Safety. The safety impacts of the design exception must be evaluated and documented. For example, if there were no crashes with the existing condition and the project would match or improve the situation, one could conclude that there would be no increase in crashes.
- i. Remedial Actions. The designer must document the proposed remedial actions which will be implemented to alleviate the retention or construction of the design feature which does not meet Department criteria (e.g., traffic control devices).
- j. Other Factors. Other factors which may have an effect on the final recommendation should be discussed. For example, the following:
 - (1) projected service life of the facility after construction is completed;
 - (2) compatibility with adjacent sections of the proposed project;
 - (3) probable time before reconstruction of the section is anticipated; and
 - (4) environmental and right-of-way impacts of meeting the Department criteria.

The design exception request must contain all of the necessary information or references without requiring the reviewer to obtain additional information (e.g., plan sheets, copies of pages of this Manual that pertain to the design exception request, or copies of pertinent pages of the AASHTO Policy on Geometric Design of Highways and Streets.)

A design exception for a local-agency project or a State project involving an element on a local agency's road should be signed by the local elected officials who have jurisdiction of the project or road.

- 2. <u>Physically-Challenged Individuals Accessibility</u>. The following will apply to a request for a waiver to the physically-challenged individuals accessibility requirements.
 - a. Federally Funded Project (Including That Exempt From FHWA Oversight). A waiver of the *Americans with Disabilities Act* (ADA) requirements, rather than a design exception, is required when it is not considered practical to comply with a specific design element of the ADA. The waiver request must be submitted to FHWA for their review. They will forward the request to the Architectural and Transportation Barriers Compliance Board (ATBCB) for approval.

The content of the waiver request will vary depending on the design element. However, it must be clearly demonstrated that compliance with the ADA requirements is not practical. There must be sufficient information submitted so that the ATBCB can readily make their decision without asking for more information. For example, if the 2% sidewalk cross slope cannot be maintained across several driveways, it would be reasonable to submit the information as follows:

- (1) a set of plans showing the location of each driveway and the profile grade of the driveway;
- (2) the station and left or right of centerline for each driveway;
- (3) the street address for each affected property;
- (4) the sidewalk cross slope that is proposed across each of the affected driveways,
- (5) the work that would be required to achieve the 2% cross slope; and

- (6) the cost of achieving the 2% cross slope at each driveway.
- b. State or Local-Agency Project With No Federal Funds Involved. If it is not practical to comply with the ADA requirements for this type of project, it will be necessary to document the project files with the appropriate justification. The justification must demonstrate that compliance with the ADA requirements is not practical. The documentation should be in sufficient detail for later use, if necessary, as the basis for a defense in case of a complaint or litigation.

3. Design Exception Request Routing and Approval.

For further information regarding approval of Level One design exception requests, see the notes or statements associated with the Design Tables in Chapter Fifty-three, Section 54-2.0, and Section 55-3.0.

- a. NHS Route Project. Within INDOT, the final concurrence in the design exception is the responsibility of the Production Management Division director. The design exception request will be submitted by Department memorandum to the Production Management Division director for review and concurrence. Upon concurrence, the Production Management Division director will transmit it for review to the FHWA for approval. An editable version of the cover memorandum, Figure 40-8C, may be found on the Department's website, at www.in.gov/dot/div/contracts/design/dmforms/. The Level One design exception request should be routed for approval as follows:
 - (1) project manager;
 - (2) Production Management Division's roadway manager or structural services manager, as applicable;
 - (3) Production Management Division director; and
 - (4) FHWA for approval.
- b. <u>Non-NHS Route Project</u>. The design exception request will be submitted by Department memorandum to the Production Management Division's roadway manager or structural services manager, as applicable, for review and approval. An editable version of the cover memorandum, Figure 40-8D, may be found on the Department's website, at www.in.gov/dot/div/contracts/design/dmforms/. The Level One design exception request should be routed for approval as follows:

- (1) project manager; and
- (2) Production Management Division's roadway manager or structural services manager, as applicable, for approval.

40-8.04(02) FHWA Procedures

All proposed exceptions to the Level One criteria that are on the Interstate system and are not exempt from FHWA oversight must be submitted to the FHWA Indiana Division's Administrator for review and approval. The proposed exceptions on a Federal-aid project will not be submitted to FHWA until after the exception has completed the internal Department process; see Section 40-8.04(01). The documentation required for the Department's exception process will usually be sufficient for FHWA evaluation.

For Level Two design exceptions, the designer should inform FHWA of such exception on a non-exempt Interstate system project.